MOSS v. BALLARD
CASE NO. 2:09cv01406

RESPONDENT'S EXHIBIT 33
(Continuation, appendix [bn000040 to 77])

RECEIPT FOR RETURN OF EVIDENCE

The following exhibits in the case number C-79-~~-~~ 2566-A C-79-2566 were given

to Trooper T. Williams on 03/31/80

by Trooper F. S. Zain

1. Exhibits to above case
2. Flotsam
3.
4.
5.
6.

T. Willi

Signature of Officer Receiving Exhibits

Tpr. Fred S. Zain

Signature of Chemist

Prepare In Duplicate.

① ? Piece of Knife Zain 12-13-79 Williams 3-31-80	② ? Piece of electrical #110 B sheet cord from Vanessa Zain 12-13-79 Williams 3-31-80	③ ? Circle from book disc Zain 12-13-79 Williams 3-31-80	④ ? Scissors Zain 12-13-79 Shumate 12-13-79 1-23-80 Williams	Green Sh Zain Willi
⑥ ? Eureka Vacuum Cleaner Shumate 12-13-79 1-23-80 Williams	⑦ ? Clock Radio Shumate 12-13-79 1-27-80 Williams	⑧ ? Childrens dish set Shumate 12-13-79 1-23-80 Williams	⑨ ? Pots + Pans Set Shumate 12-13-79 1-23-80 Williams	Cloth Soph Will Zain Will

	(4)	(5)	
?	?	?	glassware
book box	Scissors	Green hard bottom	Williams
2-13-79	Zain 12-13-79	Shumate 12-13-79	
3-31-80	Shumate 12-13-79	Zain 12-18-79	
	1-23-80	Williams 3-31-80	
	Williams ~~3-31-80~~		
	(9)	(10)	
?	?	?	
h set	Pan + Pan Set	Clothing & P. Reggette	
12-13-79	Shumate 12-13-79	Sopher 12-13-79	
23 80	1-23-80	Williams 12-14-79	
	Williams ~~2~~	Zain 12-14-79	
		Williams 3-31-80	

? Wolfe 12-18-79 12-17-79 7-79	(14) Blood ? Bernadette Reggette Sopher 12-18-79 Williams 12-17-79 Zain 12-17-79	(15) Clothing ? Bernadette Reggette Sopher 12-18-79 Williams 12-17-79 Zain 1-7-80 Williams 1-11-80 3/31/80	
? bullet - the scene	(19) ? Time Card of P. Reggette	(20) ? Electrical Cord Paul Eric Reggette	
12-13-79 -18-79	David W. Milburn - 12-13-79 Rinehart - 12-13-79 Williams 12-13-79	Sopher 12/13/79 Williams 12/13/79	

(21)	(22) ?	(23) ?	(2
Electrical Cords-? (White + Brown) VANESSA Reggettz #110 A Sopher 12/13/79 Williams 12/13/79	Electrical Cord (Brown) NEAR FEET VANESSA Reggettz Roark 12/13/79 Williams 12/13/79	Electrical Cord (White) (Piece of Cord) cut from VANESSA Reggettz ZAIN 12/13/79 Williams 8/18/80	Chan DRESSER ZA Wi
(26) ?	(27) ?	(28) ?	(2
(1) KODAK CAMERA (FROM MR. MOSS John Moss JR).	FIREARMS TRANSACTION Records forms (HOLTS)	(2) tubes blood John Moss	Knif
John Moss JR (Father) 10/29/80 Smith Williams 10/29/80	Ella Holt Smith - Williams	DR. Kepler 4-22-80 Williams 4-22-80 ZAIN 4-22-80	Sh Wi

(23) ? Electrical Cord (White) Piece of cord cut from VANESSA Reggette ZAIN 12/13/79 Williams 3/31/80	(24) ? Change PURSE DRESSER MASTER Bedroom ZAIN 12/13/79 Williams 3/31/80	(25) ? (2) POLAROID Cameras (1) Kodak Camera (SEARCH) SMITH 1/29/80	Wrapping Paper 3/31/80
(28) ? 2) tubes Blood JOHN MOSS KEPLER 4-22-80 Williams 4-22-80 WN 4-22-80	(29) ? Knife Handle Shumate 12-13-79 Williams 1-2-80	(30) ? Reggette Blood Wanda Wells 1-2-80 Williams 1-2-80 Inman - 1-2-80	(31) Guns 1-24-80

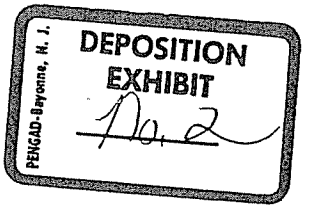
State of West Virginia, Kanawha County, ss:

IN THE CIRCUIT COURT OF SAID COUNTY:

The Grand Jurors of the State of West Virginia, in and for the body of the County of Kanawha, and now attending the said Court, upon their oaths present, that PAUL REGGETTZ, III and John Moss, Jr., on the _____ day of December, 1979, and prior to the date of the finding of this indictment, in the said County of Kanawha, feloniously, wilfully, maliciously, deliberately, premeditatedly and unlawfully did slay, kill and murder one Vanessa Dale Reggettz against the peace and dignity of the State.

SECOND COUNT: And the Grand Jurors aforesaid, upon their oaths aforesaid, do further present, that PAUL REGGETTZ, III and John Moss, Jr., on the_____ day of December, 1979, and prior to the date of the finding of this indictment, in the said County of Kanawha, feloniously, wilfully, maliciously, deliberately, premeditatedly and unlawfully did slay, kill and murder one Paul Eric Reggettz against the peace and dignity of the State.

THIRD COUNT: And the Grand Jurors aforesaid, upon their oaths aforesaid, do further present, that PAUL REGGETTZ, III and John Moss, Jr., on the _____ day of December, 1979, and prior to the date of the finding of this indictment, in the said County of Kanawha, feloniously, wilfully, maliciously, deliberately, premeditatedly and



(11)	(12)	(13)	(i
Blood Specimen ?	Nightgown of ?	Blood ?	Blo
Vanessa Reggette	Vanessa Reggette	Paul E. Reggette	Bernade
Sopher 12-14-79	Sopher 12-14-79	Sopher 12-14-79	Sopher
Smith 12-14-79	Smith 12-14-79	Williams 12-17-79	Williams
Zain 12-14-79	Zain 12-14-79	Zain 12-17-79	Zain
	Williams 3-31-80		

(16)	(17)	(18)	(1
?	?	.22 caliber bullet recovered at the scen	Time Card
Flatware	Pieces of gun		
Mrs Johnson 2-6-80	Williams 12-13-79	Williams 12-13-79	David W
Smith 2-6-80		Lane 12-14-79	Rinehart
Williams 2-6-80			Williams
Shumate 2-6-80			
Zain 2-6-80			
Williams 3-31-80			

IN THE CIRCUIT COURT OF KANAWHA COUNTY, WEST VIRGINIA

JOHN MOSS, III,

Petitioner,

VS. CASE NO. 94-MISC-663

GEORGE TRENT, Warden of the
West Virginia State Penitentiary,

Respondent.

The deposition of DAVID H. BING was taken on the 5th day of June, 1995, beginning at 1:40 o'clock p.m., at the Kanawha County Judicial Annex, Judge Paul Zakaib's Jury Room, 111 Court Street, Charleston, Kanawha County, West Virginia, before Barbara Harris, Notary Public and Certified Court Reporter, pursuant to written notice, for the purposes of discovery and/or to be read as evidence in the above-styled matter which is now pending and undetermined in said Court.

APPEARANCES: On behalf of the Petitioner:

LONNIE C. SIMMONS, Esquire
DiTrapano & Jackson
604 Virginia Street, East
Charleston, West Virginia 25301

On behalf of the Respondent:
MARY BETH KERSHNER, Esquire
Assistant Prosecuting Attorney
111 Court Street
Charleston, West Virginia 25301

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(WHEREUPON, documents were marked for identification purposes as Deposition Exhibit Nos. 3, 4, and 5, and are attached hereto.)

(Witness Sworn.)

MR. SIMMONS: Before we begin, I'd just like to note for the record that we're taking the deposition of Doctor David Bing in connection with the habeas corpus action filed on behalf of John Moss, III. My client has been notified of the deposition. He also has been informed that with habeas corpus actions he does not have an absolute right to be present at all proceedings, and he's aware of that fact. And that the purpose of taking this deposition is to make a record on some of the scientific issues that are set out in the habeas corpus petition and in an affidavit filed by Doctor David Bing.

And also I would note for the record that three exhibits have already been marked. Deposition Exhibit 3 is the recent curriculum vitae of Doctor David Bing. Deposition Exhibit 4 is an affidavit executed by Doctor Bing, executed on May 26, 1995, and that's an eight-page document. And then Deposition Exhibit No. 5 are tables that were included in the habeas corpus petition

which summarize the various findings made from the blood testing that was performed in this case.

THEREUPON came

DAVID H. BING,

a witness herein, who, after having been first duly sworn to tell the truth, testified as follows:

EXAMINATION

BY MR. SIMMONS:

Q Doctor Bing, first of all, I'd like to ask you to glance at Deposition Exhibit No. 3 and confirm whether or not that's a copy of your most recent curriculum vitae.

A (Witness examines document.) Yes, it is.

Q You note in the affidavit that you are the Scientific Director of Laboratories of CBR Laboratories in Boston, Massachusetts. Could you generally describe what CBR Laboratories does?

A CBR Laboratories is a licensed medical diagnostic testing laboratory. It performs medical testing, diagnostic testing for physicians and primarily the Harvard Medical School hospitals. It does testing in the areas of immunohematology and hematology. About eighty-five percent of its work now is involved in DNA

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diagnostic testing, but we still maintain a very active profile in the area of blood typing and the analysis of genetic markers in blood based on blood typing and also analysis of serum proteins. It's a part of the work that we do in terms of paternity testing.

Q Okay. Approximately how long have you been the Scientific Director of Laboratories at CBR?

A Well, my current title is Director of Clinical Testing, and I've really been in that position since 1986.

Q Can you also generally describe -- Focusing on the forensic testing, could you generally describe the kind of forensic testing that is conducted at CBR?

A The type of forensic testing that is done primarily focuses on DNA typing methods, particularly those -- the two principle kinds of DNA typing methods, the RFLP, which is known as Restriction Fragment Length Polymorphism, P-o-l-y-m-o-r-p-h-i-s-m, Polymorphism, and the Polymerase, P-o-l-y-m-e-r-a-s-e, Chain Reaction Methodology.

But the laboratory does paternity testing, and in the area of paternity testing we do a full panel red cell antigen typing, serum proteins, genetic typing of

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serum proteins, HLA, and when required, we will -- We don't do it in our laboratory, but we will send out for analysis of red cell enzymes, such as phospho, gluco, mutase, abbreviated PGM, Esterase D, abbreviated EsD.

We do glyoxalase testing in our laboratory. We still do that. That's for glow. But we don't do all the red cell enzymes. But we use them on occasion in our paternity testing results and use the genetic typing information that is in these systems in terms of arriving at a conclusion.

And I'm accredited for doing that kind of work because I'm accredited by the American Association of Blood Banks as a technical director for paternity testing, which means I have to be able to use those systems in our work.

Q So prior to the development of DNA testing, did CBR Laboratories and yourself routinely perform, I think what you called the red blood cell typings?

A It did, and it still does. At the point when I took over the laboratory it was still doing this kind of work and still is doing it today.

Q I think you mentioned that the laboratory was generally licensed. I just want it to be clear in the

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record. What kinds of licenses are you referring to?

A These are medical diagnostic testing licenses. We are certified in the Commonwealth of Massachusetts. We have a license in the state of Connecticut, the Commonwealth -- maybe the state of Maryland, the state of New York. We have a CLIA, that's C-L-I-A, license from the Health and Human Services which allows us to accept blood samplings from other states for clinical testing. And we do paternity testing in almost every state except New York State, so that this is a kind of testing that involves kind red cell genetic -- serum protein genetic typings that I've just described.

Q Okay. I'm not sure about this answer or not, so I'll ask you, is your laboratory involved with ASCLD, A-S-C-L-D, or its accreditation program or whatever they refer to it?

A I have petitioned to join ASCLD, which stands for American Society of Crime Lab Directors, and my application is currently undergoing review. I have a letter that I have to respond to. It's laying on my desk right now. And I anticipate that this summer the laboratory will be submitting an application to ASCLD Lab to be accredited. You have to be doing forensic work for

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at least five years before you're eligible to apply to ASCLD. We consider that we really started around the middle of 1990, so the middle of 1995 is the time of year eligible to apply.

The laboratory adheres to the rules for DNA forensic analysis articulated by the technical working group on DNA analysis methods, and based on what I've seen in the ASCLD accreditation manual, you know, how to do it, the laboratory follows, for the most part, the regulations of ASCLD Lab, because in many, many instances they're identical to the regulations that we follow for our clinical license.

Q What is your involvement in TWGDAM, T-W-G-D-A-M?

A I'm just a member of the committee. There's sixty people on the committee made up of crime lab directors around the country. I'm the representative from the Human Identity Trade Association, which is a collection of private testing laboratories that have representation on this committee.

Q Okay. Can you explain what the significance of TWGDAM is?

A Well, in 1983 -- no, not 1983 -- 1989 or so

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it became imperative for there to be some kind of consensus about how DNA testing should be done for forensic purposes here in the United States. A group of people was assembled at the FBI made up primarily of crime lab directors from public laboratories, and their job was to articulate guidelines for laboratories undertaking DNA analysis methods and guidelines for systems that were to be adopted for DNA analysis methods. And these guidelines really follow, for example, the rules -- or I mean they're very similar to the rules that we use that we have from the American Association of Blood Banks, where we're accredited for paternity testing. They're almost identical in every respect.

People have to have the proper training. They have to be in place. There are procedures in the laboratories. Systems that are used for doing the testing have to follow certain scientific principles and obey certain kinds of genetic rules. It's very much the same.

Q And I guess the final area of your credentials, you noted in the affidavit that you were qualified as an expert in molecular biology, forensic science, and genetics in the case of Glen Dale Woodall versus Carl Legursky. That was in Cabell County. Is that

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correct?

A That's correct.

Q And you were also qualified as an expert in those particular fields in the case Paul William Ferrell versus William Duncil, which was in Grant County; is that correct?

A That's correct.

Q And in both the Woodall and Ferrell cases, your expertise involved not only performing DNA testing, but also reviewing the protein and enzyme typing that had been performed by other scientists?

A Yes, I was asked to do that, and I testified about that in court.

Q Okay.

MR. SIMMONS: I'm not exactly sure how you want to do this, Mary Beth, if you wanted to ask him a question, I would now offer him as an expert in molecular biology, forensic science, and genetics in the present case.

MS. KERSHNER: I don't have any objection.

BY MR. SIMMONS:

Q Okay. Turning to the Moss case -- and I'll try to get through some of this preliminary stuff quickly

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just by going through the affidavit -- you note that in connection with Moss versus Duncil you reviewed a copy of the autopsy report that's dated December 13, 1979 that was performed by Doctor Irvin Sopher; is that correct?

A That's correct.

Q Okay. You generally reviewed the Petition for Writ of Habeas Corpus that was filed in this case?

A Yes, I did.

Q Okay. You reviewed a copy of Fred Zain's testimony from the first and second trials in the Moss case?

A Yes, I did.

Q Okay. You reviewed a copy of the laboratory notes and other documents that were produced by the State in this Moss case?

A Yes, I did.

Q And I believe -- Let's see. Yes, I believe that's all the materials you reviewed, other than I think maybe I sent you the -- I may have sent you the deposition of Robert Murphy. Do you recall seeing that?

A Let me check my notes. Well, no, I don't have the deposition of Robert Murphy.

Q Okay. I may not have sent it to you. I

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wasn't sure if I had or not.

In the materials you reviewed from the Moss case, you note in your affidavit that there were no photographs of the electrophoretic gels. First of all, I just wondered if you would explain how photographs of those gels would have assisted you in your analysis of the testing?

A This type of genetic typing, at least the enzymes, is based on looking at patterns of the proteins that are being tested under conditions where they move in an electric field. And they will move differently in an electric field depending on what genetic type they are reflecting, so that what this -- what these photographs do is allows one to look directly at the results of this testing and correlate that with the actual recorded test results.

In our laboratory it's standard practice to make a photograph of every single genetic typing that we do, and that photograph is maintained for as long as keep these files.

Q So without being able to review the photographs of the electrophoretic gels that were performed in this case, you have no basis for determining whether or

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not the typings that were determined to have been found are correct or accurate or not?

A I have the -- I gather there's a sworn deposition from Mr. Murphy that attests to the accuracy of these results. I haven't read it, but I would imagine that it does. Certainly the notes agree with what the final reports are. But as in all kinds of testing, what one hopes for is the opportunity to see the results to see if there's any kind of difference in opinion in terms of interpretation of those results, because there can be widely differing interpretations of test results. So in the absence of being able to do that, it's very difficult to really validate the test results that are recorded in the worksheets that I did have the opportunity to review.

Q You also note in your affidavit that you are generally aware of the special investigation into testing performed by Fred Zain. I just wonder if you could state generally how many cases involving Fred Zain have you reviewed as an expert?

A Well, there's Woodall -- the Woodall case. Did Zain work on the Ferrell case?

Q No, that was the FBI.

A That was the FBI. Okay. The case called

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West Virginia versus Davis, I think Mr. Zain worked on that case. The case of West Virginia versus Harris, he worked on that case. I believe there's a case of West Virginia versus Richardson, I think Mr. Zain worked on that case. And also a case of West Virginia versus McClure, I've worked on that case. And there's a case of West Virginia versus Ward, and I've worked on that case.

Q Okay.

A And there are others that are still pending.

Q Had you previously reviewed any of the documentation that was developed by the special investigation into Fred Zain's work in West Virginia?

A I read the ASCLD summary review.

Q In reviewing the Fred Zain cases, just generally speaking, that you mentioned, have you generally found what, in your opinion, were certain problems with some of his work?

A Each case is different, and the circumstances of each case are different. But overall one of the difficulties in reviewing these cases is that all that's been available for review has been the summary worksheets on which the results were finally recorded. And then there's some original worksheets in some of the cases,

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but they're not -- To the best of my recollection, in no case was there a complete set of what I would call raw data that was available for review, although there was partial results.

In no case were any photographs available for review, in no case. It's not the practice of every forensic lab to take photographs. I would be the first to admit that. But I think in light of what this is going to be used for, I think it is -- it's not an unreasonable practice to have photographic documentation of test results where the test results are based on interpretation of patterns that are seen and not measured on an instrument or something.

Q You also note in your affidavit that there was no protocol provided, and I believe, even though you're not familiar with Mr. Murphy's deposition, his testimony was that there was no protocol, written protocol, back in 1979. I just wonder if you would explain what is the significance of having a written protocol in a forensic laboratory.

A It essentially is a documentation of how the test was conducted and how -- most protocols usually also have some indication about how the results are interpreted.

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And protocol will document how you set up the test, the agents and things that go into making the test. It's sort of like a recipe for -- You know, you could sort of draw an analogy.

What the scientist is doing in the laboratory is actually baking the cake, and protocol is the recipe for what goes into making that cake. If the recipe calls for making chocolate cake and you have a lemon cake instead, you could ferret that out by looking at the protocol and say, you know, you didn't get the result that you thought you were going to get based on the protocol that's outlined.

Q Would it be correct to say that a written protocol would help standardize the practice in the laboratory, if, in fact, that written protocol were followed?

A Well, that's one of the requirements by ASCLD Lab now. ASCLD Lab does other things besides DNA. For example, it accredits laboratories in the area of serology. And a written protocol is one of their absolute requirements. Now, ASCLD Lab, this is an evolving organization, and this has really only begun to happen around 1990, '91, '92 that these have begun to evolve, is

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my understanding.
Q You mean the ASCLD Lab requirements?
A ASCLD Lab was always available for accrediting laboratories, but pretty much prior to 1990 not many laboratories really applied for that accreditation because it wasn't really a very strong organization. That may not be fair to say. It wasn't an organization to which laboratories looked for guidance in terms of establishing standardized protocols in their laboratory.
With the need for standardization in the forensic genetic testing field, and serology is part of that field, ASCLD Lab has always been there and has stepped forward and is providing this service to laboratories that allows them to become standardized within the field. So it's always been there. It's just that it's only recently that its importance has become emphasized in forensic laboratories.
Q Would you say that -- And, again, this case dates back to 1979. Do you have any basis for understanding or stating that in 1979 most forensic laboratories would have some written protocol or would that have been unusual?
A No, that wouldn't have been unusual. For

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example, I have -- in my collection of protocols I have a protocol from the FBI dated 1974 which outlines all procedures for doing serological analysis of forensic samples. So laboratories were well aware that these protocols existed, and, you know, if you wanted to, you could just adopt the FBI protocol, drop into your laboratory, and say, "This is what we're going to do." It was freely available to all the public testing laboratories and still is.
Q On a different issue -- And, again, I'll represent to you that Mr. Murphy testified that in 1979 the West Virginia laboratory did not have a formalized quality control/quality assurance program, and they did not, for example, test some of the enzymes and other materials used in the testing on a regular basis to make sure that those items were appropriate for use in testing. I wonder if you'd explain the importance of having a quality control/quality assurance program in a forensic laboratory.
A Well, again, quality assurance and quality control is something that has become recognized over the past five or six years as being important in a forensic laboratory. And most laboratories are doing this now. Prior to that time, even if a laboratory didn't have a

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quality control/quality assurance program, there still was -- they still could have run positive and negative controls on every single sample that was run so they could internally QC any given run.
As near as I could -- There's no evidence in any of the notes that the agents were checked with these controls prior to any of the runs, for example, to make sure that the red cell antigens -- The glutinating agents, called the antisera or antibodies that are used in red cell glutinations, you normally check them before you do a run to make sure they're working, and those are usually recorded in the notes of a run.
Controls are usually run of electrophoresis of known samples. PGM, for example, there's a known standard that contains all the known types, and that's always run in parallel with the unknowns just to do a control on that.
So those kinds of things could have been done in 1979. It's just a matter of the laboratory director's decision as to whether or not those should be done. But I mean, for example, in our laboratory we were doing -- The CBR Laboratories, even though I wasn't in charge of it, but in 1979 I can show you work pages where

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all of the -- and photographs of gels where controls were run on every single run that was done. So it's good laboratory practice and generally acknowledged by people who ran laboratories at that time as being important things to do.
Q In your review of the documentation provided by the State in connection with the testing, you noted in your affidavit that none of the original notes of the work performed were made available to you. What was your basis for making that assertion?
A Well, most of the documentation I received were reports, handwritten summaries that eventually became the reports, summaries of -- I call them worksheet summaries, in other words, all the composite results were listed of the samples tested. Now, there should be a notebook or some kind of backup to that information. It just isn't there.
Q Have you reviewed -- or generally speaking, in your review of the Fred Zain cases that you mentioned, have you seen some cases where the original notes were included?
A There were some where the original notes were available, yes.

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Q What is it about the original notes that distinguishes them from the summary sheets you described?

A Well, they are -- Some of these original notes will have, like, for example, I've seen -- I'm trying -- I can't remember the case exactly, but there were some PGM results where it was possible to sort of track down through these handwritten notes where the original results were recorded. And in some instances there would be a place where controls were run, and they, in fact, were run and recorded, and other places where there were controls that were supposed to be run and it was just left blank, so it meant they weren't run or they weren't recorded, one or the other. I didn't have any of that kind of documentation with this particular case.

Q In the affidavit you've generally summarized that -- and this is in number 15 of the affidavit -- that these various problems, lack of documentation, no protocol, in your opinion, render the scientific data in this case meaningless. I just wonder if you could elaborate on that statement.

A Well, by that I mean that the -- there is so much data on these stains that weren't analyzed, it would seem to me there should be some extensive notes backing

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that material up. So that in that -- in the context of not being able to look at the backup data, other than the summaries, it becomes, you know, almost impossible for me to either agree or disagree with the final outcome of the results. And that's what I mean by when I say it's meaningless. I can't agree, I can't disagree. All I can say is what was reported.

Q You next generally state that for purposes of your review, that even assuming the accuracy of the typings in this case, the conclusions were flawed for several reasons. And we'll go through those and maybe, to the extent that you can, illustrate any of these with specific examples, it would be helpful to do so. And if you want to diagram anything that you feel might help explain something, I'll make my legal pad available for you, and we can make that an exhibit.

One of the first general ideas or principles you stated was that where blood samples are discovered at an alleged crime scene, it's important to identify the types of the known possible donors of that blood. I wonder if you'd explain why that is the case.

A Well, forensic testing is designed to exclude. That's why this testing is done. It's designed

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to exclude the person who is false -- who is not the true biologic donor of a given sample. So that to that extent, one tests, and if one has no exclusion, you keep testing and testing and testing until you reach sort of the end of what you're able to test for. At that point if you have no exclusion, then you can, at that point, make some kind of comment about how often you might expect to find this combination of markers.

But in the meantime, if there are people who are potential donors to these samples, scientifically you want to be able to test all the people who might be true biologic -- who are candidates to be true biologic donors of these samples. So if there are other people involved besides the people who were involved in this report, they really should have been -- they should be included in the testing panel, if it's possible. And it's not always possible, and I'd be the first to acknowledge that.

Q Okay. You state that under the facts of this case that, at a minimum, the persons who lived in the Reggettz house, which would include the three victims, Vanessa Dale Reggettz, Paul Eric Reggettz, and Bernadette Reggettz, and then the father, Paul Reggettz, III, would be known possible donors of blood; is that correct?

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A That's correct.

Q And as far as you know, based upon your review, you're not aware of any other known possible donors of blood in the Reggettz house?

A No.

Q The second point that you make is that only those types identified from blood found at the alleged crime scene that are different from the types of the known possible donors provide information relevant to a determination as to the source of the blood evidence found at the crime scene. I wonder if you could explain that, and if you feel that an illustration is appropriate, do that.

A Well, let me try to explain it, and then, if necessary, I can provide an -- do a drawing. The -- At a crime scene, when stains are collected, the origin of those stains is unknown, so one always has to make the -- one can't make any assumptions about the potential -- about who the donors are. But more important, one cannot make an assumption that any given blood stain collected at a crime scene is from a single source. So if one wants to distinguish possible sources of that blood and you have a group of people who all have that -- all have a given type,

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then that type doesn't really help you distinguish the source of that blood, because you can't assume that it's not a mixture.

Think of it another way. Suppose that the distinguishing factor of a blood stain was something that you can actually visualize. Suppose that you could look at this blood stain and you could say unequivocally, "I know that that blood stain came from somebody who has brown hair." Brown hair is a genetic marker. In some ways it's very similar to, say, a blood type antigen because there is a certain -- The color or the reason it's brown is due to certain genetic markers that result in color. So you say I know -- It doesn't make any difference how I know it. I know this blood stain is from somebody who has brown hair. Now, you get your list of possible donors to that and you -- and they all have brown hair. You can't say that any one person is more likely than another to be a donor to that blood stain.

Now, let's say if we can do a little bit more. Let's say, "Well, I can" -- "I know that the person who contributed to this blood stain has brown hair and is left-handed." So you now look at your candidates, and you look at them and you say, "Well, three of them are left-

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handed and say two are right-handed." Well, the two who are right-handed are automatically eliminated, but you still can't distinguish between the other three because left-handedness and brown hair color are the same in all of them.

So that if you have a series of markers and they're identical in all the people that are being tested, then you can't really use that to try to distinguish the source of a given blood stain. You can only look to the differences, not to the similarities, because the question that is being asked here, the scientific question that is being asked is who could possibly be a biologic donor to this blood stain.

And, secondly, I don't know whether there's a single person or from a bunch of people. As I stated in my affidavit, is it a single source sample or many people are sources of the sample. So you have to look to the differences between individuals who you test rather than to their similarities.

Q Okay. The next general point you have in your affidavit is that where a type from a known possible donor of the blood matched the type from the blood discovered, it is not appropriate to include that type in

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calculating the frequency that the blood was deposited by a suspect. Now, you may have already gone through that somewhat. You have a specific example. That might be one where going through a specific example from the table or from your affidavit might be helpful to illustrate that point.

A Well, the -- again, the focus here is on the unknown sample, and if there are any similarities there between that blood sample and all of the people that are involved, even -- I mean suppose it's -- suppose it's something really --

Let's take another genetic typing you can sort of visualize. Let's suppose that the blood sample that you know came from somebody who has got brown hair, is left-handed, and is an albino, has no pigment color in their skin at all. Albinism is a very rare occurrence in the human population. It's very rare indeed. Now, at that point, the fact that you now have three individuals who are left-handed and have brown hair, but only one of them is an albino. You say that's a very rare event. It could only have been that person.

So you can now use that to reason backwards and say, "Alright, albinism is a very rare event, so I know

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that this blood stain came from an albino." That could only have occurred in one out of a very few number of people who have this inherited genetic trait.

That is separate from the question of saying, "How often is the combination of brown hair, left-handism and albinism found in the general population?" That's a separate question. That's how often do I find these together in the general population. You can make that estimate as well. But that's a general question about the population. That is not a question about the sample. The only thing that distinguishes that sample is what is different about that sample than is in the known individuals that you're testing. So you've got a -- Those two things have to be kept separate.

And that's what I mean by this, that you can't take a combination of factors that are found in the general population and relate it to a specific sample. All you can say is that if these are present and I now have data to show that are indeed present, this is how often I would expect to find that combination of markers in the general population, providing they are behaving and acting independent of each other, because that's the other issue in terms of being able to do that, they have to be behaving

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independently. They have to be what we say scientifically, they sort independently.

Q I think the specific example that you have in the affidavit, I'd like for you to go ahead and turn to that one, as well.

A Uh-huh.

Q Well, you quoted the report where the statement is made that, quote, "The combination of blood groups O, PGM 1+1-1, AK 1, EAP BA, EsD 2-1, ADA 1, GLO 1 2, Hp2-1, and Gc 1 occurs in approximately 0.03% of the population." In connection with that statement, you assert that the conclusion implies that all of the blood typings obtained from the crime scene for these particular items were the same as all the blood typings obtained from Mr. Moss. And I wondered if you would give an example of what you mean where you believe that that general conclusion is inaccurate or overstates.

A Well, for example, there's an item called flashlight.

Q Do you have the item number?

A It's item -- It doesn't have an item number, it just says flashlight. It's on Table II. It continues the last page of Deposition Exhibit No. 5.

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Q Okay.

A There -- What it is is that there's -- It just says PGM 1, so we don't know if it's 1+1- or 1+, 1-. You know, there's three possibilities. It could be 1+, it could be 1-, it could be 1+1-. So we don't know whether or not the 1+1- is there or not. No result was contained in -- was obtained Haptoglobin or Gc. That's Hp and Gc. So to take this figure here and apply it to this sample here is not -- implies that this combination of factors here would be found in that.

Now, in contrast, I mean, if I didn't point it out now, I'm sure someone would point it out to me, there is one result here where there is a complete match between Mr. Moss and a stain found at the crime scene. That's item seven, the kitchen door curtain. And that's also the case reported on the clothing of Bernadette Reggettz, which is the very last line of Table II, and Christmas wrapping paper, which is the next to last -- is the third to the last line of Table II.

Now, there -- The results are here reported to match the types that are reported for Mr. Moss. So at that particular point, if these results are indeed correct, then at that point it is fair to do a calculation and say,

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"I would expect to find these series of markers in a certain percentage in the population." But it relates to the general population, it doesn't relate to the sample. The sample is specific to the forensic situation that's being investigated.

Q So is your point that the conclusions reached should have been based upon the specific types found from each particular item tested, as opposed to using the general population figure and implicitly saying that all those types were obtained from all the evidence?

A If that's -- If that was the intent, to implicitly say that this is the type that was found on all of these items, that would be incorrect. On the other hand, those three items it would have been fair to make this conclusion. But it wouldn't have been fair to make that conclusion about the flashlight.

Q I think the next sort of general principle that you talked about in your affidavit is that it is only proper to combine the frequencies on types obtained from a blood sample where results, in the absence of any other data, are consistent with the blood sample coming from a single source. And you follow that up with a statement that -- Well, let's start with that statement. Why don't

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you -- Those two points, number 29 and 30 of the affidavit, they may sort of relate to each other, but if would just generally explain that idea.

A Well, I think in my previous direct testimony I said that one of the inherent difficulties with serological testing is there's no way to know whether or not a blood sample is a mixture or a single source. The only samples that you really know are truly single source samples are the samples that are taken directly from somebody be they alive or dead. You know where those come from, so that that -- And there's no way, to my knowledge, anyway, to, for example, decide whether or not a blood stain is a single source sample. It's very difficult to do.

Now, as I'm sure will be pointed out, if you have series of markers, I couldn't say that it wasn't a single source. I mean, for example, take item 7, the kitchen door, I couldn't say that that's not a single source, but I have no way of scientifically sorting that out. It could be a mixture of a whole bunch of people, for all I know. And there's no way to sort that out.

So I think that in describing the results of testing, by this, I think that one has to be very cautious

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about overstating what the meaning is of these kinds of calculations. They are an accurate calculation. I don't disagree with the 0.03%. My tables are a little different than the ones they us, so it's probably -- I came up with something like 0.05%. That certainly is close enough. As far as I'm concerned, it's the same number.

But the -- I don't know that these are single samples. And the other thing that I have to go back to is, is that I have no way of verifying these really very important data as they relate to this case.

Q Okay. Let me -- You've mentioned the example of item number 7, the kitchen door curtain, and in that example typings apparently were obtained in the -- Let's see. It looks like that's nine different groups that were tested. In the table, the particular types in bold are types that are similar to or identical to known blood types from some of the other -- from some of the known possible donors of blood in the Reggettz home. And I just wanted to make sure I understand when you're talking about calculating the frequency of this particular sample. Are you saying that, for example, since the ABO for the kitchen door curtain was found to be O, but there are known possible donors in the Reggettz house who are O, that you

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should not include that particular typing in calculating the population frequency for item number 7?

A Everybody in this case tested as type O blood.

Q Yes.

A So as far as this is -- this marker is concerned, this does not provide me any information about that particular sample. So if I were doing this calculation, I would not use the fact that approximately forty percent of Caucasians are type O blood --

Q Okay.

A -- to this sample.

Q Right.

A I mean, I think I've stated before, I would use it in saying how often would I expect to find this type in combination with all the others in the general population. That's a valid calculation. But with respect to this sample, I would say, "What I'm going to look to is I'm going to look to the differences," and say, "How often would I expect to find that difference?" So, for example, here is -- there's a place where the EAP is -- even there, there still is a person in the Reggettz household who is BA, so I'd have to consider that person as a possible donor

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of the BA on this kitchen door stain, number 7. So that's where they have that in common. The ones where they aren't in common is the 1- is something -- no, the 1+ is the one type that is not seen in anybody.

Q Okay. The PGM 1+ --

A PGM 1+ is a type not seen in anybody.

Q Okay. So you would use that?

A That's right.

Q And what else in item number 7 would you use? I think it's kind of hard to tell what's bold and what's not. It looks like the --

A Gc 1 --

Q Okay.

A -- because everybody in the Reggettz household is 2-1.

Q Okay. So would --

A And Esterase D. Everybody in the Reggettz household is a 1, this sample is a 2-1. So I don't know -- I can use the 2 as a distinguishing factor, but I can't really use the 1. So the frequencies of each one of these alleles is no. You know, we know how often the 1+ would be found and how often the 2 would be found and how often the 1 would be found, and because they occur together, you have

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to look at the frequency of them as they occur together. So you could actually use -- you would actually use the frequency of 1+ or 2-1 and 1 here. But that would allow you to say, "This unique set here is found in a certain portion of the population." And that is specific to this sample.

Q Okay. And it's a thing that's a good example. I think the -- maybe the last general statement in the affidavit is that -- and this may, again, repeat something you've already said -- was that each of the types found from each individual sample must be treated separately rather than in conjunction with each other, because it is not possible, scientifically, to link together the types found from different blood samples. Just to make sure I know what you're talking about, would you explain that general idea?

A Well, if you have different blood samples, different donors, you can't take the frequency of that person's blood type and link it together with the frequency of a person -- the second person's blood type. What you can do is you can say, "Well, in the general population I might find this combination in, say, three percent of the population or I might find this other combination in, say,

ten percent of the population." So at that particular point you can extrapolate a little bit and say, "Well, that probably represents thirteen percent of the total population might have this combination of factors."

But that still isn't specific to the sample in question. The sample in question is -- The distinguishing factors about the sample in question is what distinguishes it from the other -- all the individuals who have been tested, and that's where the focus has to be.

Q Okay. You note in the affidavit that there's no evidence as to when the blood stains were deposited and what caused the blood to be deposited, and I take it you agree that the serological typing is unable to determine when a blood sample was deposited; is that correct?

A I don't know of any method, serological, DNA, that can tell you how old a stain -- a biological stain is.

Q In paragraph 39 of your affidavit you state that the only blood types of significance from any of the samples are PGM, Gc, and EsD, and I wonder if you'd explain why -- what's your basis for making that statement.

A Well, again, going back to Mr. Moss's type

and to taking item 7 as an example, those are the three systems where that stain could be distinguished from people in the Reggettz house. There's PGM, the 1+1- is not found in any of the people in the Reggettz house. Even though you find somebody with a 1 -- a 1-, you don't find anybody there with a 1+. So the 1+ is what really distinguishes the stain from -- in the PGM system and now you have 1+1-, so you would have to deal with that as a combination. You can't separate that out.

Esterase D, everybody in the Reggettz house is a 1, this sample has a 2-1, so that that 2 distinguishes the Esterase D in this stain from everybody in the Reggettz house.

The Haptoglobin is -- Well, Gc, I'm sorry, Gc, there's a 1 there. Everybody in the Reggettz house has a 2-1 in the Gc system, so if anybody -- and this, perhaps, illustrates it very well -- if anybody in the Reggettz house had been a source of that stain, you would expect to find a 2 present, as well, and you don't. So, you see, that eliminates anybody in the Reggettz house as a donor of this particular stain. It doesn't tell you who is the donor of that stain, it just eliminates them.

Again, it goes back to my previous

testimony, testing is designed to exclude the person who is not the true biologic donor of the stain.

Q I think that -- Let me see. You've already gone over 41, 42, and 43 in your affidavit, and you've already talked about there's no basis for assuming a single source. Your final conclusion in your affidavit is that based upon the foregoing analysis, the statistical conclusions are overstated in this case. And again, I take it, that relates back to some of the problems you've already discussed, and I don't guess we need to go through that again unless you have something to add to that.

A No, I don't have anything to add. It's -- I think this affidavit may be a little bit repetitious in the sense that I've stated some things several different ways, but I have done that in an effort to clarify my opinion that I have derived based on review of the test results in this case.

Q The final paragraph in the affidavit is that you generally concur with the statements concerning the scientific data that are set out in the habeas corpus petition on pages 29 through 36 without necessarily adopting all the particular language used, that's correct?

A That's correct.

Q Maybe just as a final clean-up matter just to make sure that it's clear in the record, when you -- when you go through -- when you went through your analysis on, let's go back to item number 7, the kitchen door curtain, and you talked about how you should focus on the types that are different from the known possible donors, and so you looked at the PGM, the EsD, and the Gc. And you stated that you should focus on those differences. I wonder if you'd explain -- and let's see if I can figure out a way of saying this -- what is the -- I guess the scientific problem with simply multiplying all of the samples or all the population frequencies that were found from item number 7 together, as opposed to simply focusing on the differences.

A There's nothing wrong with doing that. All that says is that I would -- when you did that calculation, that would say, "This combination of factors would be expected to be found in a certain portion of the population," in this particular case using the number that was calculated in this case, .03% of the population would have that combination of factors. There's nothing wrong with that.

The thing about it is, is before going to

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that -- going ahead to make that calculation, one first has to decide what distinguishes this stain from any other stain that's present. And my point is, is that the PGM, the Esterase D, and the Gc types are what distinguish this, and I have to couple that with the scientific fact that I have no way of telling whether or not this is a mixture of a single stain or multiple donors to the stain. And this would be true whether this was DNA testing or serological testing.

All one can do is report the data as one sees it and say, "This is how often I would expect to find this combination of markers." It's a unique or it's not -- it's a rare combination or it's not very rare at all. It would be like a verbal description of the scientific result. But the -- But beyond that, it's really difficult to say much more.

And at that point it's really up to everybody else who is involved in looking at this evidence to come to a decision as to how that stain could have gotten there if, in fact, an individual is the donor of that stain. All we can do is just say, "This is what the scientific data said."

Q Would it be accurate to say that by giving

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what I'll call the general population frequency number on item number 7, that would essentially give you the number that is the most discriminating number versus the calculation you make by multiplying the population frequencies of the types that are different. So in other words, you would be providing the range, one includes everything together, and I think implicitly --

A Yes.

Q -- it says it's a single source --

A Yes.

Q -- and the other is taking into account well, this may be a mixed sample, but here is where these three different types and what the population frequencies would be there?

A And that could still be a very compelling number.

Q Right.

A Even the range can be a very compelling component.

Q And just so I also make it clear, are you saying that the calculation method that you have discussed here is what would have been appropriate, is it what would have been mandatory, or how would you describe the

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additional calculation that you've been talking to where you focused on the differences in each sample?

A There isn't anything really mandatory in doing this. It really is based on understanding how genetic systems work and coupling that with the experience of the forensic scientist who appreciates the nature of the samples that are being studied. Population geneticists never run into this problem. When you get a tube of blood, you know it came from a single person, you do a typing on that and you say, "Oh, this is a rare combination of markers in this individual." There isn't any question about where that sample came from.

A stain collected off a disorganized scene, that are frequently what happens in a forensic situation, at that point all we can do is test what is there, say, "This is what I found. Here's a" -- If all of these were -- all of these markers would be expected to be found in a certain combination, these are the markers that distinguish this stain from -- and make this person as a possible donor of that stain.

For example, and one of the statements that might be said about this is that -- and then allow the individuals who are going to make decisions about this to

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come to their own conclusions -- one might say that, for example, on the stain on the kitchen door Mr. Moss couldn't be excluded in the PGM, the Gc, and the Esterase D systems. That just says where -- what distinguishes that sample from all the others.

And then if you want to know what this combination is, then you could go and say a combination of 1+ -- PGM 1+, EsD 2-1, and Gc 1 is a certain number, and the combination of type O blood, PGM 1+2+, AK 1, BA, for EAP 2-1, for EsD, ADA 1, 2 for GLO I, 2-1 for Haptoglobin, and Gc 1, that's found in three percent of the population -- or .03% of the population.

And at that particular point the scientist has done their job, presented you with the best possible data that you can use, and at that point the decision is now up to those people involved in the process who actually have to make the next decision in relationship to what this -- how this data is going to be used in the case being tried.

Q Let me maybe just ask for clarification, then, in the affidavit, just to make sure the record is clear. And I'd ask you to look at paragraph 43 of your affidavit, and maybe if you'd just read that to yourself

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and then --
A (Witness examines document.) Well, what paragraph 43 says is it addresses the issue about I don't know if these are mixtures or not, and there's no way I can tell that.
Q And under --
A Under those circumstances, all I can say is what distinguishes it and make a statement to that effect, and then to the extent that that is helpful, the numbers are helpful, one can sort of narrow down the range of people who might be -- have that unique combination of markers not shared by other people. And then beyond that, one can also, accurately and without overstating the facts, find out what a whole series of combination of markers might be expected to be found in the general population. But those are all separate items that have to be taken into account in light of where that sample came from.
Q And then in paragraph 41, the way I read that is that where you find the different types, you can state the population frequency for those different types, but you -- for statistical purposes, you should not multiply them together. Just let me make sure I understand here.

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A Not unless you know for sure that it's a single source blood sample.
Q Okay. So when you were giving your general example in item number 7, and let's say you found a population frequency for the PGM type and for the Gc type, you're saying that it would be appropriate to state those particular population frequencies, but you should not multiply them together unless you know for a fact that there's a single source?
A With respect to that sample, that specific sample, you really don't know. You don't know. I mean you can calculate things, but to -- but to say that I could say with certainty about this sample, that this is a single -- that this combination of factors is what's -- this is how often I'm going to find this combination of factors, you have to also be able to state with an equal amount of certainty that it's also a single source sample. And that's the problem with all forensic testing.
MR. SIMMONS: I think that's all the questions I have.
EXAMINATION
BY MS. KERSHNER:
Q Doctor Bing, your testimony on direct was

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that it's -- that except where you are certain that you have a single source on a blood sample, such as taking a known blood sample from a suspect, there you know that you've got a single source donor, correct?
A (Witness nods affirmatively.)
Q But that under other circumstances where evidence is collected like at a crime scene, that you cannot be certain that it's a single source donor; is that correct?
A These are -- Yes, these are stains, stains collected at a crime scene, as opposed to something that's taken from an individual, for example, a blood sample, a cell sample, a swab, something like that where you actually know where it came from.
Q If a person who has some expertise in serology, however, has collected the stains or examined the stains in some fashion at the crime scene or immediately afterwards, is there any way that, in addition to typing of the blood, the general condition of the stain could indicate whether it's a single source or possibly a multiple source?
A Well, I'm not a crime scene investigator, but as I understand it, there are ways to, in terms of

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looking at splatter patterns of blood, for example, if a blood stain is found in and around a victim that's lying on the floor or something like that, people who have spent a lot of time investigating crime scenes would probably testify to the fact that it would be inconsistent with all their experience that this could have come from anything but a single individual. But a stain -- But the whole scene has to be looked at together from that point of view. It literally requires a great deal of experience and expertise. There are people who can do that. There are people who know how to do that.
Q Now, where there is a mixture or a suspected mixture of blood, such as at a crime scene, on clothing or other exhibits from a crime scene, would it be normal, where there is a mixture or a suspected mixture, to find a different intensity in the banding? For example, if there's an A, the victim is type A, the suspect is type B, and where -- the area where you're testing shows both A and B, would you then be able to conclude that there was a mixture?
A In serological testing that's not of the one -- it's my understanding it's not one of the criteria by which the test is set up. Certainly I would be the last

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person to deny that an experienced serologist, if they had had a lot of experience in dealing with mixtures, and they have accumulated experience in that area, they could probably testify to that, based on their experience, this looked to them like a mixture. I would accept that.

But, you know, at least to my knowledge, the procedures that describe, for example, how EAP or Esterase D is done, mixtures would be very hard to pick out, would be very hard to pick out. With Haptoglobin and Gc, those are systems with which I'm very familiar. Minor types are not often interpreted as a result of being a mixture, because even in a single source sample, sometimes you will pick up a minor type just because of the nature of these systems.

Q You also testified about the lack of protocol at the laboratory -- lack of written protocol at the West Virginia State Police Serology Laboratory in 1979. But at that time, was it usual for a laboratory of that type, in other words, a state run laboratory, forensic-type laboratory, was it usual for that laboratory to have written protocols?

A I truly have no specific knowledge about forensic testing because I really didn't start doing this

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until around 1989, 1990. And protocols were just something that I always had, so it was a surprise to me to hear from people in the field that this was not an uncommon practice in certain laboratories. But I have no specific knowledge about what was generally practiced in the field at that time. I mean I do have documented the FBI had a written protocol in 1974, and it's actually a very useful protocol because it has a lot of the original development of these systems, which from a scholarly point of view, is a very useful piece of paper.

MS. KERSHNER: I have nothing further.

MR. SIMMONS: Okay. I don't have any follow-up questions. The court reporter needs to hear you waive your signature, if you so desire, or not waive.

THE WITNESS: I waive my signature.

(WITNESS STANDS ASIDE.)

(WHEREUPON, the deposition was concluded at 3:00 o'clock p.m.)

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REPOR , CERTIFICATE

STATE OF WEST VIRGINIA,

COUNTY OF KANAWHA, to-wit:

I, Barbara Harris, Notary Public within and for the State of West Virginia, duly commissioned and qualified, do hereby certify that the foregoing deposition of DAVID H. BING was duly taken by and before me, under the West Virginia Rules of Civil Procedure, at the time and place and for the purpose specified in the caption thereof; the said witness having been duly sworn by me to testify the whole truth and nothing but the truth concerning the matter in controversy.

I do certify that the said deposition was correctly taken by me by means of the Stenomask; that the same was transcribed under my supervision, and that the said transcript is a true record of the testimony given by said witness.

I further certify that I am not connected by blood or marriage with any of the parties to this action, am not a relative or employee or attorney or counsel of any of the parties, nor am I a relative or employee of such attorney or counsel, or financially interested in the action, or interested, directly or indirectly, in the matter in controversy.

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It is stipulated and agreed that the signature of the witness is hereby expressly waived to the foregoing deposition.

Given under my hand this 16th day of June, 1995.

Barbara Harris, CCR
Notary Public

My commission expires August 30, 2003.

*TABLE I**

KNOWN BLOOD SAMPLES

PERSON	ABO	PGM	AK	EAP	EsD	ADA	GLO I	Hp	Gc
Vanessa Reggettz	*O*	2+*1-*	*1*	B	*1*	*1*	*2*	*1*	2-*1*
Bernadette Reggettz	*O*	2+2+	*1*	B	*1*	*1*	*2*	2-*1*	2-*1*
Paul Eric Reggettz	*O*	2+*1-*	*1*	B	*1*	*1*	*2*	2-*1*	2-*1*
Paul Reggettz III	*O*	2+2-	*1*	*BA*	*1*	*1*	*2*	*2*	2-*1*
John Moss, III	*O*	1+*1-*	*1*	*BA*	2-*1*	*1*	*2*	2-*1*	*1*

*The shared blood attributes between Petitioner's known blood types and the blood types of the Reggettz family are highlighted in Table I to emphasize the similarities and differences in the known blood types.

*TABLE I**

KNOWN BLOOD SAMPLES (CONTINUED)

PERSON	ABO	PGM	AK	EAP	EsD	ADA	GLO I	Hp	Gc
Jack C. Neal, Jr.	?	?	?	?	Not 2-1	?	?	?	?
Roger L. Province	?	?	?	?	Not 2-1	?	?	?	?
William J. Monk	?	?	?	?	Not 2-1	?	?	?	?
Ross E. Gillespie	?	?	?	?	Not 2-1	?	?	?	?
Marvin D. Smith	?	?	?	?	Not 2-1	?	?	?	?
Richard A. Rollins	?	?	?	?	Not 2-1	?	?	?	?
Joseph Morehouse	?	?	?	?	Not 2-1	?	?	?	?
Nathaniel Brown	?	?	?	?	Not 2-1	?	?	?	?
Thomas F. White	?	?	?	?	Not 2-1	?	?	?	?

*Petitioner has been unable to find any explanation as to why the blood of Jack C. Neal, Jr., Roger L. Province, William J. Monk, Ross E. Gillespie, Marvin D. Smith, Richard A. Rollins, Joseph Morehouse, Nathaniel Brown, and Thomas F. White was tested.

*TABLE II**

UNKNOWN BLOOD SAMPLES

ITEM	ABO	PGM	AK	EAP	EsD	ADA	GLO I	Hp	Gc
1. Knife pieces	O	2-1	1	B	1	1	2	?	?
2. Room next to bath	O	2-1	1	B	1	1	2	?	?
3. Front bedroom carpet	O	2-1	1	B	1	1	2	?	?
4. Bedspread front bedroom	O	2-1	1	B	1	1	2	?	?
5. Pillow case front bedroom	O	2-1	1	B	1	1	2	?	?
6. Electrical cord	O	2-1	1	B	1	1	2	?	?
7. Kitchen door curtain	O	1+1-	1	BA	2-1	1	2	2-1	1
8. Sheet kitchen floor	O	2-1	1	B	1	1	2	?	?
9. Back door handle	O	2-1	?	?	?	?	?	?	?
10. Kitchen sink	?	?	?	?	?	?	?	?	?
11. Utensil drawer	O	1	1	BA	2-1	1	2	?	?
12. Pillow case bedroom beside bath	O	1	1	BA	2-1	1	2	?	?
13. Door between bedroom and living room	O	2-1	1	B	1	1	2	?	?
14. Door between bedroom and front door	O	1	1	BA	2-1	1	2	?	?
15. Change purse	O	1	1	BA	2-1	1	2	?	?
16. Medium t-shirt	O	2-1	?	?	1	?	?	?	?
17. Jockey shorts	?	?	?	?	?	?	?	?	?
18. Vanessa Reggettz's nightgown	O	2-1	1	B	1	1	2	?	?
19. Doll	O	2-1	1	B	1	1	2	?	?

*The blood types obtained from the unknown blood samples that are identical to the known blood types obtained from Vanessa Reggettz, Paul Eric Reggettz, Bernadette Reggettz, or Paul Reggettz, III, are highlighted in Table II.

TABLE II

UNKNOWN BLOOD SAMPLES (CONTINUED)

ITEM	ABO	PGM	AK	EAP	EsD	ADA	GLO I	Hp	Gc
Table knife	?	?	?	?	*1*	?	?	?	?
Christmas wrapping paper	*O*	1+*1*-	*1*	*BA*	2-*1*	*1*	*2*	*2-1*	1
Flashlight	*O*	1	*1*	*BA*	2-*1*	*1*	*2*	?	?
Clothing of Bernadette Reggettz	*O*	1+*1*-	*1*	*BA*	2-*1*	*1*	*2*	*2-1*	1

CURRICULUM VITAE

NAME: David Howard Bing

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Phone #: (617) 278-3450

HOME ADDRESS: 27 Waverly Street, Brookline, MA 02146

DATE OF BIRTH: August 3, 1938

PLACE OF BIRTH: E. Cleveland, Ohio

EDUCATION:

1960	B.A.	Wesleyan University, Middletown, CT (Distinction in Biology)
1966	Ph.D.	Western Reserve University, Cleveland, OH (Microbiology and Biochemistry)

POSTDOCTORAL TRAINING:

1966-1968	University of California, Berkeley, CA (Bacteriology and Immunology)

RESEARCH FELLOWSHIPS:

1960-1966	NIH Predoctoral Fellow
1966-1968	American Cancer Society Postdoctoral Fellow
1970-1971	Cercheur Etranger of INSERM, Hopital Necker, Clinique Nephrologique, Paris, France
1972-1973	Research Career Development Awardee, NIH
1976-1981	Established Investigator, American Heart Association
1982-1983	NIH Senior Fellowship, Dept. Cell Biology, Children's Hospital, Harvard Medical School, Boston, MA

LICENSURE AND CERTIFICATION:

1987	Certified Technical Director of Clinical Reference Laboratory in Commonwealth of Massachusetts
1988	Certified Technical Director for Paternity Testing by American Association of Blood Banks
1989	Certified Technical Director of Clinical Reference Laboratory in New York, Maryland, and Connecticut
1995	Certified Laboratory Director of Diagnostic Immunology, Immuno-hematology, and Paternity/Identity Testing in the State of New York

ACADEMIC APPOINTMENTS:

1968-1971	Assistant Professor, Dept. of Microbiology and Public Health, Michigan State University, E. Lansing, MI
1971-1973	Associate Professor (Tenure), Depts. of Microbiology and Public Health and Human Development, Michigan State University, E. Lansing, MI
1973-1978	Principle Research Associate, Dept. Biological Chemistry, Harvard Medical School
1978-1983	Instructor, Dept. Biological Chemistry, Harvard Medical School
1992-Present	Principal Associate in Pediatrics, Department of Medicine, Harvard Medical School, Boston, MA

NON-ACADEMIC APPOINTMENT:

1983-1986	Associate Director of Biological Sciences, Cambridge Research Laboratories, Ortho Diagnostics Systems Inc., Cambridge, MA
1992-Present	Adjunct Faculty, College of Pharmacology and Allied Health Sciences, Northeastern University, Boston, MA

HOSPITAL APPOINTMENTS:

1973-	Senior Investigator, The Center for Blood Research, Boston, MA
1973-	Research Associate in Immunology, Children's Hospital, Boston, MA
1980-1983	Associate in Medicine, New England Deaconess Hospital, Boston, MA
1983-	Sr. Research Associate in Medicine, Beth Israel Hospital, Boston, MA
1986-1994	Vice President and Scientific Director, CBR Laboratories, Inc. (A subsidiary of The Center for Blood Research)
1988-	Director of Laboratories, The Center for Blood Research, Boston, MA
1994-	Director of Clinical Research Testing, CBR Laboratories, Inc., Boston, MA

MAJOR COMMITTEE ASSIGNMENTS:

1969-1973	Chairman of Graduate Committee (Admissions and Thesis Defense Committee) Dept. Microbiology and Public Health, Michigan State University
1975-1983	Ad Hoc Reviewer for National Cancer Institute Program Project Grants, NIH
1975-1983	Ad Hoc Reviewer for National Heart, Lung, and Blood Institute, NIH
1979	NHLBI Committee which Prepared 10-year Summary of Research in the Area of Blood Resources
1980-	Ad Hoc Reviewer Allergy and Infectious Disease Study Section, NIH
1980-	Ad Hoc Reviewer, National Science Foundation
1980-1983	Plasma Derivatives Review Group, American Red Cross, Washington, DC
1986-	Reviewer Special Study Section for Small Business Innovative Research, NIH

EDITORIAL BOARDS:

1979-	Associate Editor Molecular Immunology
1980-1984	Associate Editor, Journal of Immunology
1980-	Ad Hoc Reviewer, Biochemistry
1984-	Ad Hoc Reviewer, Journal of Immunology

MEMBERSHIPS IN PROFESSIONAL SOCIETIES:

1966	Sigma Xi
1969-	American Association of Immunology
1969-1987,1992-	American Chemical Society
1969-	American Association for Advancement of Science
1983-	American Association of Clinical Chemistry
1989-	International Society for Forensic Haemogenetics
1990	American Academy of Forensic Sciences
1990-	Association of Northeast Forensic Scientist

MAJOR RESEARCH INTERESTS:

1. Therapeutic Plasma Protein Derivatives
2. Immunodiagnostics for the Blood Bank
3. DNA Probe Diagnostics for the Blood Bank and Genetic Testing
4. DNA Forensic Testing

TEACHING EXPERIENCE:

1960-1966	Teaching Assistant, Dept. Microbiology, Western Reserve University, Cleveland, OH
1968-1973	Graduate Course in Immunochemistry, Dept. Microbiology Public Health, Michigan State University
1968-1973	Seminar Chairman, Dept. of Microbiology and Public Health, Michigan State University
1968-1970	Seminars in Immunology, Dept. Biochemistry, Michigan State University
1972	Video Course in Basic Immunology for medical students, veterinary students, medical technologists, nurses, undergraduates, Dept. Microbiology and Public Health, Michigan State University
1973-1976	Advanced Biochemistry, Dept. Biological Chemistry, Harvard Medical School
1973-1980	Seminar Chairman at The Center for Blood Research
1992	Foundations of Forensic Sciences, Northeastern University, Boston, MA

CONTINUING EDUCATION:

1985	Gordon Conference of Cancer
1985	Federation of American Society for Experimental Biology and Medicine - American Association of Immunologists
1986	Federation of American Society for Experimental Biology and Medicine - American Association of Immunologists
1987	American Association of Blood Banks.
1988	American Association of Clinical Chemistry
1989	American Association of Clinical Chemistry
1989	13th Congress for the Society of Forensic Haemogenetics
1989	American Association of Blood Banks
1989	UCLA Symposia on Molecular and Cell Biology - Defense Molecules
1989	Promega International Symposium on Human Identification
1990	American Academy of Forensic Sciences
1990	American Association of Clinical Chemistry
1991	Second Promega International Symposium on Human Identification
1991	American Academy of Forensic Sciences
1992	American Academy of Forensic Sciences
1992	Third Promega International Symposium of Human Identification
1993	American Academy of Forensic Sciences
1993	Jackson Laboratory Short Course on Advance Human and Mammalian Genetics
1993	Fourth Promega International Symposium of Human Identification

PATENTS:

1. Richard Laura and David Bing: Amidinophenylmethanesulfonylfluoride. 4.303.592. December 1, 1981.
2. David H. Bing: Means and Method for Purifying Clq, Clr and Cls. 4,374,061. February 15, 1984.
3. Patrea L. Pabst and David Bing: Electrodialysis preparation of purified AHF concentrate. 4,435.318. March 6, 1984.

ORIGINAL REPORTS:

1. Bing DH, Stavitsky AB. Hemagglutination with aldehyde fixed erythrocytes for assay of antigens and antibodies. Proc Soc Exp Biol Med 124:1166-70, 1967.
2. Wofsy L, Kimura J, Bing DH, Parker D. Affinity labeling of rabbit antisaccharide antibodies. Biochemistry 6:1981-6, 1967.
3. Bing DH, Stavitsky AB. Isolation and characterization of two quantigenically active peptides from bovine beta-lactoglobulin A. Immunology 15:305-17, 1968.

4. Bing DH. The nature of the active site of a subunit of the first component of human complement. Biochemistry 8:4503-9, 1969.
5. Bing DH. Inhibition of guinea pig complement by aromatic amidine and guanidine compounds. J Immunol 105:1289-91, 1970.
6. Knudson KC, Bing DH, Kater LA. Quantitative measurement of guinea pig complement with liposomes. J Immunol 106:258-65, 1971.
7. Bing DH. Purification of human C1s by affinity chromatography. Immunochemistry 8:539-50, 1971.
8. Bing DH. Purification of the first component of human complement by affinity chromatography on human immunoglobulin linked to Sepharose. J Immunol 107:1243-7, 1971.
9. Rosenhaft ME, Bing DH, Knudson KC. A vacuum assisted apparatus for blood sampling in guinea pigs. Lab Animal Care 21:598-9, 1971.
10. Somack RL, Bing DH, Costilow RN. Preparation and characterization of 2,4-diaminovaleric acid, an intermediate in the anaerobic oxidation of ornithine. Anal Biochem 41:132-7, 1971.
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12. Bing DH, Mernitz JL, Spurlock SE. Inactivation of the first component of human complement by m-[o-(2-chloro-5-fluorosulfonyl-phenylureido)phenoxybutoxy]-benzamidine. Biochemistry 11:4263-8, 1972.
13. Sledge CR, Bing DH. Binding properties of the human complement protein C1q. J Biol Chem 248:2818-23, 1973.
14. Sledge CR, Bing DH. Purification of human complement protein C1q by affinity chromatography. J Immunol 111:661-6, 1973.
15. Bing DH, Cory M, Doll M. Inactivation of human C1 by benzamidine and pyrioinium sulfonyl fluorides. J Immunol 113:584-90, 1974.
16. Assimen SN, Bing DH, Painter RH. A simple method for isolation of the subcomponent of the first component of complement by affinity chromatography. J Immunol 113:225-34, 1974.
17. Spurlock SE, Hunt SM, Bing DH. Cryopreservation of sheep erythrocyte intermediates EA and EAC4 and utilization of the thawed cells in complement assays. J Immunol Methods 6:53-59, 1974.
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21. Andrews JM, Rosen FS, Silverberg SJ, Cory M, Schneeberger E, Bing DH. Inhibition of C1s-induced vascular leakage in guinea pigs by substituted benzamidine and pyridinium compounds. J Immunol 118:466-71, 1977.
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24. Donaldson VH, Rosen FS, Bing DH. Role of the second component of complement (C2) and plasmin in kinin release in hereditary angioneurotic edema (H.A.N.E.) plasma. Transactions of the Association of American Physicians XC:174-83, 1977.
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26. Feldman RJ, Bing DH, Furie BC, Furie B. Interactive computer surface graphics approach to study of the active site of bovine trypsin. Proc Natl Acad Sci 75:409-12, 1978.
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28. Bing DH, Laura R, Andrews JM, Cory M. Exo-site affinity labeling of C1s, a subcomponent of the first component of complement by m-[o-(2-chloro-5-fluorosulfonylphenylureido)phenoxybutoxy]benz-amidine. Biochemistry 17:5713-8, 1978.
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42. Bing DH. Complement activating and binding properties of ISG and IGIV. BOB Workshop on Methods for Evaluating Plasma Derivatives; 1983.
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57. Salazar M, Deulofeut H, Yunis JJ, Bing DH, and Yunis EJ. A fast PCR-SSP method for HLA-DQ generic typing. Tissue Antigens 41:102-106, 1993.

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62. Yunis JJ, Ossa H, Salazar M, Deulofeut R, Delattoz A, Delgado MB, Bing DH, Yunis EJ, and Yunis JJ. Major histocompatibility complex class II alleles and haplotypes and blood groups of four Amerindian tribes of Northern Columbia. Human Immunol. Submitted, 1994.

63. Wengler G, Gorlin JB, Williamson JM, Rosen FS, and Bing DH. Non-random inactivation of the X-chromosome in early lineage hematopoietic cells in carriers of Wiskott-Aldrich syndrome. Blood, in press, 1994.

REVIEWS, CHAPTERS IN BOOKS:

1. Bing DH. Purification of the first component of human complement and its subunit C1 esterase. In: Jakoby WB, Wilchek M, eds. Methods in Enzymology. Affinity Methods Enzyme Purification Part B. NY: Academic Press, 731-46, 1974.
2. Bing DH. Purification of the human complement protein C1s by affinity chromatography. In: Resolution, Properties, and Genetic Aspects of Complement, NY: MSS Information Corp. I:45-57, 1974.
3. Cory M, Andrews JM, Bing DH. Design of exo-affinity labeling reagents. In: Jakoby WB, Wilchek M, eds. Methods in Enzymology XLVI. Affinity Labeling. NY: Academic Press, 115-30, 1977.
4. Bing DH, Andrews JM, Cory M. Affinity labeling of thrombin and other serine proteases with an extended reagent. In: Lundblad RL, Fenton JW II, Mann KG, eds. Chemistry and Biology of Thrombin. Michigan: Ann Arbor Science Publishers, 159-77, 1977.
5. Fenton JW II, Landis BW, Walz DA, Bing DH, Feinman RD, Zabinski MP, Sonder SA, Berliner LJ, Finlayson JS. Human thrombin: Preparative evaluation, structural properties and enzyme specification. In: Bing DH, ed. The Chemistry and Physiology of the Human Plasma Proteins. NY: Pergamon Press, 151-85, 1979.
6. Cory M, Andrews JM, Bing DH. Affinity labeling of serine proteases with an active site-directed irreversible inhibitor. In: Kalman TI, ed. Drug Action and Design: Mechanism Based Enzyme Inhibition. NY: Elsevier, 259-69, 1980.
7. Isliker H, Bing DH, Hynes RO. Interaction of fibronectin with C1q, a subcomponent of the first component of complement. In: Steinberg CM, Lefkovitz I, eds. The Immune System. Basel: S. Karger. 2:231-238, 1981.
8. Donaldson V, Rosen FS, Bing DH. Kinin generation in hereditary angioneurotic edema (H.A.N.E.). Plasma Bayer Conference on Kinins, 1982.
9. Bing DH. Biochemical specificity of complement protein C1q. In: Schumaker V, Calada F, Sercarz E, eds. Protein Conformation Changes as a Signal. NY: Plenum Publishing, 119-130, 1983.
10. Bing DH. Chemical precipitation and removal of IgG and immune complexes. In: Pineda AA, ed. Selective Removal of Plasma Components. NY: Futura Publishing Co, 139-168, 1984.
11. Bing DH, DiDonno AC, Regan M, Strang C. Blood plasma processing by electrodialysis. In: Membrane Separations in Biotechnology. R. McGregor, ed. Marcel Dekker; 135-160, 1985.
12. Bar-Shavit R, Bing DH, Kahn AJ, Wilner GD. Thrombin mediated mononuclear cell chemotaxis: Relationship of ligand structure to biological activity. In: Membrane receptor and cellular regulation. 329-338, 1985.
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14. Bing DH, Di Donno AC, Regan M, Strang C. Blood plasma processing by electrodialysis. In: Membrane Separations in Biotechnology. McGregor R, ed. Marcel Dekker, 131:1573-1582, 1986.
15. Nicholson-Weller A, Rivard M, Lopez-Trascasa M, and Bing DH. Regulation of the classical complement pathway by heparin. In: Marchalonis JJ, and Reinisch CL, Eds. Defense Molecules. Alan R. Liss, Inc. UCLA Symposium on Molecular and Cellular Biology, 121:201-212, 1990.
16. Bing, DH. Plasma Proteins. In: Hematology Basic Principles and Practice. Hoffman R, Benz, EJ, Jr., Shattil, SJ, Furie, B, and Cohen, HJ, Eds. Churchill Livingstone, 1573-1582, 1991.
17. Bing DH, Yunis EJ, and Yunis E. The use of genetic markers in the analysis of anthropological origins of South Amerindians. Proc Pan American Conference on HLA, 1992.
18. Bing DH, Williamson J, Lewandrowski EL, Yunis JJ, Delgado MB, Yunis EJ, Ramos O, and Yunis TE. Analysis of blood groups and VNTR markers in two Colombian Indian tribes. Proceedings Third International Symposium on Human Identification, pp. 231-243, 1992.

19. Bing DH, and Alper CA. Complement in Health and Disease. In: Colvin, RB, Bhan AK, and McCluskey R. Eds. Diagnostic Immunopathology, Raven Press. In press, 1994.
20. Bing DH. Development of DNA typing methods for forensic analysis. Gerber, SM, and Saferstein, R., Eds. Chemistry in Crime II. American Chemical Society. In press, 1994.
20. Bing DH, and Alper CA. Biochemistry of Plasma Proteins. In: Anderson, K., and Ness, P.M., Eds. Scientific basis of transfusion medicine: Implications for clinical practice. Saunders Press, 1994.
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2. Feldman RJ, Bing DH. TAMS - Teaching Aids for Macromolecular Structure, 1980.
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6. Tavella BA, Miller HC, Bing DH, Ghannam RD, Dougherty GD. Quantitative lymphocyte response to Candida albicans measured by viral plaque assay. Fed Proc 32:356, 1973.
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11. Andrews JM, Bing DH, Cory M. Chemical basis for the specificity of thrombin, plasmin, C1s, C1r and trypsin. Circulation 54:200, 1978.
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3/21/95

IN THE CIRCUIT COURT OF KANAWHA COUNTY, WEST VIRGINIA

JOHN MOSS, III,

Petitioner,

v.

Civil Action No. 94-MISC-663

GEORGE TRENT, Warden of the
West Virginia State Penitentiary,

Respondent.

PETITIONER'S MOTION FOR PRODUCTION OF RECORDS RELATING TO TROOPERS MICHAEL DON SMITH AND TERRY WILLIAMS

Petitioner John Moss, III, respectfully moves the Court for an order requiring Respondent to produce, under the seal of this Court, all personnel records maintained by the Department of Public Safety on Troopers Michael Don Smith and Terry Williams, including, but not limited to, their complete personnel files, all documentation relating to any hearings held in connection with any disciplinary actions, and all documentation relating to any formal or informal investigation relating to Petitioner's case, for the following reasons:

1. Trooper Michael Don Smith and Trooper Terry Williams were the main law enforcement officers involved in the investigation of the Reggettz murders and the confessions given by Paul Reggettz, III, and Petitioner.

2. In the habeas corpus petition, Petitioner has raised the issue of whether his confessions were obtained in violation of his constitutional rights.

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November 22, 1994

Lonnie Simmons, Esquire
DiTrapano and Jackson
604 Virginia Street East
Charleston, WV 25301

RE: Moss v. Trent
94-MISC-663

Dear Mr. Simmons:

Enclosed please find a copy of the serological records from the West Virginia State Police int he above-referenced case. This is the raw data that Judge MacQueen directed be delivered to you.

I am also submitting copies of this data to Judge MacQueen and to the Circuit Clerk to enclose in the case file. Thank you for your attention to this matter.

Very truly yours,

Mary Beth Kershner

Mary Beth Kershner
Assistant Prosecuting Attorney

cc: Hon. A. Andrew MacQueen, Circuit Judge
Hon. Cathy Gatson, Circuit Clerk

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3. Petitioner's intention in raising this constitutional issue, which was raised in both of his trials and in the hearings held during the juvenile transfer proceedings, was to develop new evidence relevant to the issue.

4. Petitioner has information that an informal investigation may have been conducted by the Department of Public Safety into certain allegations made against Troopers Michael Don Smith and Terry Williams directly related to the underlying facts of this case.

5. If such an investigation had been conducted, clearly any documentation related to such investigation is relevant to Petitioner's habeas corpus action.

6. If no such investigation had ever been conducted, then Petitioner needs to develop this fact on the record, with a member of the Department of Public Safety testifying under oath after making a thorough search of the records.

7. Presumably, if such an investigation occurred, there may be some documentation in the personnel files of these two troopers relating to the investigation.

8. Requests for the production of documents and other discovery in a habeas corpus action was discussed by the West Virginia Supreme Court in *Gibson v. Dale*, ___ W.Va. ___, 319 S.E.2d 806 (1984), which held in Syllabus Point 5:

> "A habeas corpus petitioner is entitled to careful consideration of his grounds for relief, and the court before which the writ is made returnable has a duty to provide whatever facilities and procedures are necessary to afford the petitioner an adequate opportunity to demonstrate his entitlement to relief."

9. As to the right of a habeas corpus petitioner to discovery, the West Virginia Supreme Court stated:

> "The right to access to relevant evidence in the possession of the State is a component of the right to full consideration of one's claims. Certainly, the habeas petitioner, by virtue of his status as a prisoner, is almost always at a disadvantage in developing the evidence necessary to support his allegations. The court to which a motion for production of documents or records is addressed in a habeas proceeding should exercise flexibility in ruling on the motion. Where the petitioner can demonstrate that materials in the possession of the State contain relevant evidence which would enable him to prove specific allegations entitling him to relief, the court should grant the motion." ___ W.Va. at ___, 319 S.E.2d at 814.

10. Petitioner respectfully submits that all of this documentation, including all documents in the personnel files maintained on Troopers Michael Don Smith and Terry Williams, are relevant and critical to the final determination of the issues raised in the habeas corpus petition.

11. Any concerns Respondent may have regarding the privacy of the officers involved will be protected by having their complete personnel files produced under seal for review by this Court, which can determine whether any of the information contained in the files is relevant to Petitioner's habeas corpus action.

12. Without this documentation, the issues raised in connection with the confessions cannot be resolved.

For the foregoing reasons, Petitioner John Moss, III, respectfully moves the Court for an order requiring Respondent to produce, under the seal of this court, all personnel records maintained by the Department of Public Safety on Troopers

Michael Don Smith and Terry Williams, including, but not limited to, their entire personnel files, all documentation relating to any hearings held in connection with any disciplinary actions and all documentation relating to any formal or informal investigations relating to Petitioner's case.

JOHN MOSS, III, Petitioner,

--By Counsel--

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CERTIFICATE OF SERVICE

I, Lonnie C. Simmons, do hereby certify that a copy of the foregoing **PETITIONER'S MOTION FOR PRODUCTION OF RECORDS RELATING TO TROOPERS MICHAEL DON SMITH AND TERRY WILLIAMS** was served upon counsel of record on the 11th day of April, 1995, by the United States Postal Service, postage prepaid.

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